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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,869	04/16/2001	Mark Vange	CIRC013	5581
25235	7590	05/09/2005	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEENTH ST DENVER, CO 80202			LIN, WEN TAI	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,869

Applicant(s)

VANGE ET AL.

Examiner

Wen-Tai Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)

DETAILED ACTION

1. Claims 1-27 are presented for examination.
2. Claims 13-23 and 25-27 are objected to because of the following informalities:
 - i. As to claim 25, the clause "tracking the priority values associated with individual resources requested by the user" is not clearly understood because the word "priority" is used for reflecting the status of precedence in a competitive environment. It is not clear how could a resource be associated with a "priority" before the resource is being requested. For example, a resource can be said to have inherently high priority when the resource is being requested or reserved by a user of high priority. It is noted that in Applicant's specification the only term that could be related to the resource priority is "content priority" [see paragraph 106], which makes sense because it is related to information that can be distributed over the network, rather than the non-movable network resources. Thus, unless Applicant explicitly clarifies it, the term "resource priority" is construed as equivalent to the user's priority.
 - ii. As to claim 27, it is unclear whether the clause "based ... upon the number of resources that are requested that are secure and unsecure" is meant to be "based ... upon the number of resources that are requested that are both secure

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and unsecure" or "based ... upon the number of resources that are requested that are secure and the number of resources that are requested that are unsecure". Clarification is required in response to this office action.

iii. As to claims 13, 19 and 20, it is not understood what is meant by "converting the priority parameters to a first (or second) priority value". That is, the word "converting" is confusing because a parameter is like an attribute or variable, which can be associated with a value through assignment, not through conversion.

3. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

Claim Rejections - 35 USC § 102

4. Claims 1-18 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ellesson et al.[U.S. Pat. No. 6459682].

5. Ellesson was cited in the previous office action.

6. As to claims 1 and 4-6, Ellesson teaches the invention as claimed including: a method for prioritizing information within a network comprising the steps:

receiving at least one set of information within a network [Fig.1B; col.4, lines 46-52];

associating at least one priority value with the at least one set of information [col.3, lines 8-20; col.4, lines 56-61]; and

transmitting the at least one set of information across the network at least partially based on the priority value [Abstract].

7. As to claims 2-3, Elleson teaches that "Packets are categorized into separate streams based on a number of criteria that depend on the terms of SLA and the network capabilities. The Edge Device uses a set of classification rules to determine the appropriate service level category to which the packet is assigned. These rules may be configured in the Edge Device or obtained by querying a Directory Server ..." (see col.4, lines 33-44), wherein information obtained for identifying the senders, resource facilities or communication content by the ingress Edge device (E1) includes "ingress interface, source address, source port, destination address, destination port, protocol id, Class of Service identification, contents of packet, header fields in transport protocol" [col.4, lines 14-32]. As such, it is clear that the priority value must be at least based on the packet content type and user identification because both are needed to identify a service level with respect to a predefined packet content from the Service Level Agreement (SLA) [col.5, lines 48-54], wherein the ingress Edge device (which is an intermediary device between the client (A1, Fig.1B) and the server (A2, Fig.1B)) selectively determines a

priority value based on a value at least associated with the content type and user identification parameters.

8. As to claim 7, Ellesson further teaches that the at least one intermediary server receives a set of priority information via an out-of-band control system [col.3, lines 14-16 and 38-53; col.4, lines 46-52; note that the fact that the directory and control server (see Fig.1B) out side the backbone networks uses different protocols, comparing to the protocol uses in the backbone networks, indicates that both the directory server and the control server are out-of-band nodes Ellesson's system.

9. As to claims 8-10, Ellesson further teaches that the network comprises:

at least one front-end server computer [E1, Fig.1B] operatively connected to at least one client [A1, Fig.1B];

at least one back-end server computer [E2, Fig.1B] operatively connected to at least one server [A2, Fig.1B] and to the at least one front-end server computer, wherein the connection to the front-end server computer is implemented over a heterogeneous network [col.2, lines 23-25; col.4, lines 3-13; note that the Internet is a heterogeneous network], wherein the at least one front-end server computer is responsible for determining at least one priority value for the at least one set of information transmitted to a back-end server and the at least one back-end server computer is responsible for determining at least one priority value for the at least one set of information transmitted

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to a front-end [note that for information flowing from A2 to A1, E2 and E1 are the ingress and egress devices, respectively].

10. As to claim 13, Ellesson teaches the invention as claimed including: a method of transmitting requests from a client [A1 Fig.1B] to a request-specified origin server [A2, Fig.1B] comprising the acts of:

 sending one or more requests from one or more client computers, the requests designating an origin server [col.2, lines 23-25; e.g., clients at A1 node make service request to a server located at A2 node];

 determining for each request whether a priority parameter is associated with the request [e.g., determining at the priority of the packets containing requests to node A2 of Fig. 1B];

 converting the priority parameter to a first priority value [e.g., assigning the request packets with a priority according to the principles set forth at the Abstract]; and

 transmitting the requests to the origin server in an order based upon the priority values [col.4, line 28 – col.5, line 6].

[Examiner Note: The underlined text serves to provide better understanding in mapping the claimed feature to the prior art.]

11. As to claims 14-15, Ellesson further teaches that the priority parameter is included with the request or determined by performing a lookup in a table [Abstract; col.4, lines 46-52].

12. As to claim 16, Ellesson further teaches that the priority parameter is obtained from the origin server [col.4, line 66 – col.5, line 2; col.7, lines 16-25; i.e., the origin server (or the information provider) can be a customer specified in a SLA for which clients's request packet directing to the same origin server is given a specified service level through information provided by the directory].

13. As to claim 17, Ellesson further teaches that the step of sending comprises sending the request with an associated domain-specific user priority parameter [note that the IP address identifying the destination server in a request packet is, by default, a domain-specific priority parameter for looking up a corresponding service level or traffic class in the directory].

14. As to claim 18, Ellesson further teaches that the step of sending comprises sending the request with an associated content priority parameter [i.e., the content information contained in a request packet is a key index for looking up a corresponding service level or traffic class in the directory (see col.4, lines 14-32)].

15. As to claims 11-12 and 20-24, since the features of these claims can also be found in claims 1-10 and 13-18, they are rejected for the same reasons set forth in the rejection of claims 1-10 and 13-18 above.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 19 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elleson et al.(hereafter "Elleson") [U.S. Pat. No. 6459682], as applied to claims 1-18 and 20-24 above.

18. As to claim 19, Elleson does not specifically teach converting the priority information [e.g., a service level or traffic class according to the SLA] to a second priority value for use it or transmitting the response.

However, Elleson teaches that the priority value is determined based on the initial traffic classes and the existing data flow rates. Since the data flow rates at the source node could be different from that of the destination node, it is clear that the priority values assigned to the response packets may be different from that of the request packet [i.e., the priority value may be changed from a first value (which is

initially assigned) to a second value (which takes into account of the traffic flow rates – see Abstract)].

19. As to claim 25, Ellesson teaches a system/architecture of implementing a service level agreement specifying customer expectations of performance in terms of parameters such as availability, delay, loss, priority and bandwidth for specific traffic characteristics. In other words, the control parameters are associated with a service provider's network resources [col.1, lines 42-52; col.2, lines 38-41; col.5, lines 32-47]. The specified various parameters of priority, for example, are either contained in the customer's requesting packets or looked-up from a directory server and are monitored/tracked at an edge device [col.4, lines 46-51] for encoding the headers of packets to determine their network priority [Abstract: lines 10-12; i.e., each of the requested network resource is being tracked along with the user's priority].

20. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. Claim 27 would be allowable if rewritten or amended to overcome the informality issue, set forth in this Office Action.

22. Applicant's arguments filed on 3/1/2005 for claims 1-25 have been fully considered but they are not deemed to be persuasive.

23. Applicant argues in the remarks that:

- i. As to claims, 1, 13 and 20, Applicant's "appended parameter" is different from Ellesson's TOS header field or encapsulating the packets with additional IP header information because it provides flexibility and does not require special support from the common networks such as Internet.
- ii. As to claim 13, 19 and 20, Ellesson does not teach conversion of priority parameters to a priority value.
- iii. As to claim 25, Ellesson does not associate a priority value with each of a plurality of resources and tracking the priority values associated with individual resources requested by the user.

24. The examiner respectfully disagrees with applicant's remarks:

1. As to point I: It is submitted that a parameter added to a packet through encapsulation is also an act of appending the parameter. Further, Applicant's acclaimed advantages (e.g., flexibility and without special support, etc.) are not found in the claim languages.
2. As to pint ii: Because of the inherent difference between a parameter and a value, the act of "converting" a priority parameter to a priority value has been interpreted as "assigning" a priority value to the parameter in the previous and the instant office action (see paragraph 2 of this office action).
3. As to point iii: Because of the lack of association between the "content priority" (as taught in Applicant's specification) and the "resource priority" (as seen in the

claim language), the meaning of the latter has been given a broader interpretation as being equivalent to a user's priority in view of Ellesson's non-movable network resources (see paragraph 2 of this office action).

For at least the above reasons, it is asserted that Ellesson reads on claims 1-25 (which has been mainly due to Applicant's broad claim languages that are subjected to its broadest interpretation).

25. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)872-9306 for official communications; and

(571)273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

May 6, 2005

Wen-Tai Lin
5/6/05